

Case report

Suicide by tapestry needle

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Abstract

A case of completed suicide committed by a 46-year-old male by inserting a tapestry needle in his heart is described. Scene investigation findings and autopsy examination revealed signs of self-harm efforts as well as punctures at both forearms and the right and left sides of the neck. The deceased caused a penetrating cardiac injury which resulted in cardiac tamponade.

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1. Introduction

Suicidal penetrating wounds of the anterior chest wall with sharp forces are rare and mostly inflicted by knives, glass fragments or other sharp instruments.¹ Suicide by pins and needles rates up to 33% among all penetrating cardiac injuries and consequently immediate death is unusual.^{1,2} The main cause of mortality is lack of early diagnosis and intervention and mostly due to cardiac tamponade.² We report a case of successful suicide by tapestry needle.

2. Case report

In Spring 2005, a 46-year old male was found death close to a hut near a village, far from where he lived. The scene search and investigation disclosed that the body was dressed and prone. Next to the body, a nylon bag which contained a shirt and some food were noted. His other clothes were found in the hut. A suicide note addressing his family, a financial statement about his debts and prayers were present in his pocket. The person was known to be healthy and free of narcotic drug use or alcohol. He had no previous psychiatric history, yet had been diagnosed depression by a pri-

mary care physician 1 week prior to suicide. Recently, he seemed somewhat depressed and on the last day he said farewell to his wife as he would not come back again.

The initial external examination of the body revealed several puncture wounds at the left and right forearms and right and left sides of the neck, 26, 14, 4 and 1, respectively. On the left side of the sternum, at the level of the fourth intercostal space, four pricks and a needle protruding (17 mm in length) from the chest was observed (Fig. 1).

Autopsy was performed next day. The autopsy examination found gross signs of punctures at the both forearms and the right and left side of the neck, indicating signs of self-harm attempts. The chest was opened. Subepidermal hemorrhagic infiltration was present surrounding the needle. The needle was extracted from fourth intercostal space on the left midclavicular line. The needle was 12 cm in length (Fig. 2). Haemorrhagic pericardial fluid which resulted in cardiac tamponade was present. There was no sign of bleeding to thorax cavities. The track of the needle was located. The needle entered the heart from the apex, passed through the left ventricle, subsequently reached and penetrated the left lung for 1 cm (Fig. 3). Toxicological analyses of blood and urine samples were completely normal. The autopsy discovered cardiac tamponade secondary to penetrating cardiac injury by a tapestry needle. The death was classified as a suicide.

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Fig. 1. Four puncture wounds and the needle protruding (17 mm in length) from the chest are seen.

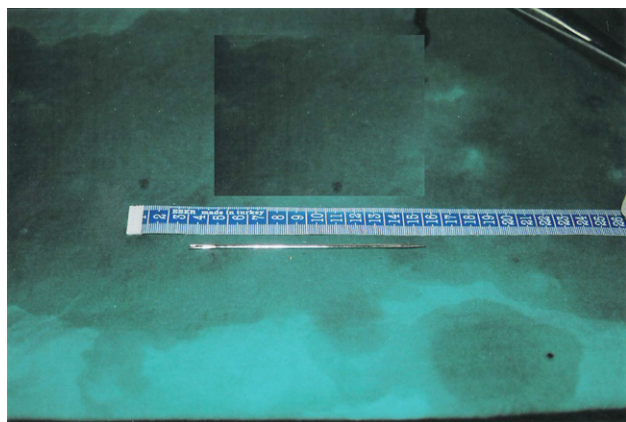


Fig. 2. Tapestry needle (12 cm in length).

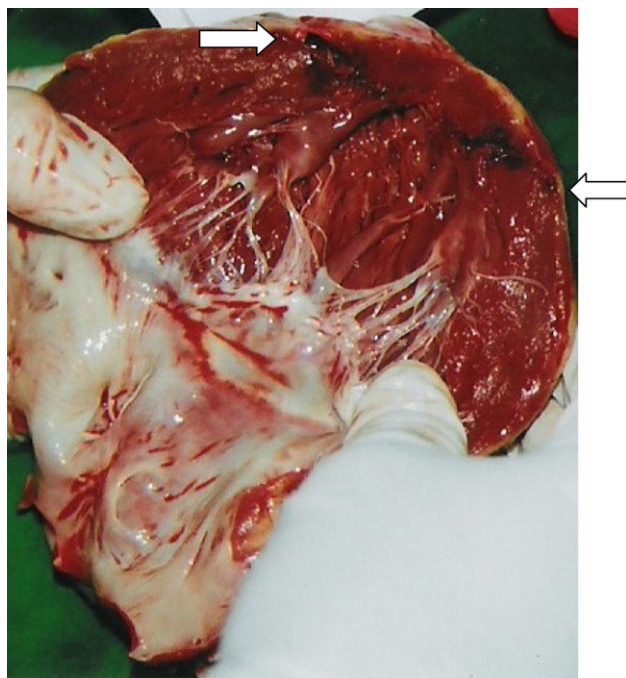


Fig. 3. Trace of the needle demonstrated from apex passing through left ventricle (arrows indicate entry and exit).

3. Discussion

In the reported case, an adult who is known to be religious, family-oriented, healthy and free of drugs took his own life by inserting a tapestry needle in his heart. In the previously presented cases of self-fixing a needle in the heart, almost all the subjects were under the effects of recreational drugs or alcohol.³ The person started harming himself by sticking the needle in his arms and neck. Various puncture wounds were noted which implied several attempts to find a vessel. After unsuccessful attempts, subsequently, he self-inserted the needle in his heart.

Completed suicide by needle is unusual.² Subjects usually present to emergency room and immediate death is rare. Mortality is due to lack of early diagnosis and intervention.³ Theistic religions view suicide strictly as sinful and highly detrimental to one's spiritual journey. Cultures in Middle East do not promote the moral value and psycho-sociological conception that it is better for the individual to commit suicide than to lose honor or any other reason whatsoever. Nevertheless, psychiatric illnesses such as depression are known to lead the person to suicide despite individual's belief and culture.⁴

Penetrating cardiac injuries caused by bullets, knives, hooks form an essential subset of traumatic cardiac diseases.^{2,5} Such wounds are localized most often to the free wall of right ventricle and in decreasing order, free wall of left ventricle, right atrium and left atrium. The pathophysiological outcome depends on many factors e.g., type of penetrating tool, site of the injury, existence of pericardial trauma, involvement of lung penetration, speed of the instrument. Pericardial tamponade or bleeding is often the cause of death in cases of penetrating cardiac wounds.²

Although the incidence of suicide is widely underreported due to both religious and social pressures and possibly completely unreported in some areas, a report by the World Health Organization (WHO) states that nearly a million people take their own lives every year, more than those murdered or killed in war.⁶ It is accepted that, depression is the most common diagnosis in older adults who have attempted suicide.

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